REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 10, and 12-18 remain in this application. Claims 1-9, 11, and 19-27 have been canceled without prejudice.

The Official Action objected to claims 10, 11, 12, and 13 stating that the claims do not clearly separate the claim elements, such as by a line indentation.

In response, claim 11 has been cancelled as stated above, and claims 10, 12 and 13 have been amended responsive to the Official Action's objection.

The amendments to independent claims 12 and 13 are non-substantive and do not introduce new matter.

Independent claim 10 has been further amended to remove the recitation of a partially fused-bonding agent as aluminum oxide; the amendment is supported in the specification and introduces no new matter.

The Official Action objected to the specification for failing to provide proper antecedent basis for subject matter claimed in claim 16. The Official Action states that the specification does not appear to disclose a substrate of baked-mud or porcelain, as required in claim 16.

The Official Action rejected claim 16 under 35 U.S.C. 112, first paragraph, stating that the claim contains subject matter which was not described in the specification in such a way

as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In response, it is respectfully submitted that claim 16 finds support in the specification at page 17, lines 21-25, which discloses the "substrate used may be an ordinary ceramic-based fire-proofing material." Baked-mud and porcelain, required by claim 16, are understood in the art as ordinary ceramic-based materials having fire-proofing properties.

Withdrawal of the 35 U.S.C. 112, first paragraph rejection is therefore respectfully requested.

The Official Action rejected claims 10-13, 17, and 18 under 35 U.S.C. 102(b) as being anticipated by Yasuhisa et al. (JP2001213666A; hereinafter JP '666).

The Official Action states that JP '666 teaches a jig for calcining an electronic component comprising a substrate and a zirconia layer, wherein the liquation binding material serves as a partially fused bonding agent and is formed of oxide mixtures such as aluminum oxides, yttria (a transition metal oxide), and MgO (an alkaline earth metal oxide). The Official Action makes reference to the English translation of the applied reference, paragraphs [0011]-[0012].

In response, it is respectfully noted that the applied reference JP '666 appears to be a machine translation of a disclosure originally written in Japanese, and as such its

disclosure is uncertain. It is also noted that no English translation of the Tables was provided.

It is respectfully submitted that JP '666 does not teach a zirconia layer prepared by bonding coarse zirconia and fine zirconia by means of a partially fused-bonding agent, and coated on the substrate characterized in that the partially fused-bonding agent is alumina-magnesia-based spinel composite oxide, as recited by claim 10 as amended.

As best as can be understood, JP '666 discloses a materials composed of one or more metal oxides selected from yttrium oxide (Y_2O_3), calcium oxide (CaO), magnesium oxide (MgO), and strontium oxide (SrO), and aluminum oxide (Al_2O_3) (paragraph [0011]). All but the aluminum oxide perform the function of stabilizing a part of the zirconia by reacting with the zirconia particles on the non-stabilizes zirconia surface through the liquid phase during calcination (paragraph [0011]).

The aluminum oxide, however, is disclosed as providing "matching" between the substrate and the zirconia layer ("the aluminum oxide provides good matching with a base material and a zirconia layer," paragraph [0011], [0024]). JP '666 discloses that preferably two or more of Y_2O_3, CaO, MgO, and SrO act as a zirconia stabilization compound, while aluminum oxide (Al_2O_3) acts between the substrate and the zirconia layer to bond the zirconia, thereby increasing strength and suppressing the pulverization of the zirconia layer by increasing adhesion to the